Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Rulemaking to Amend Part 1 and Part 21 of the	)	CC Docket No. 92-297
Commission's Rules to Redesignate the 27.5 - 29.5	)	
GHz Frequency Band and to Establish Rules and	)	RM-7872; RM-7722
Policies for Local Multipoint Distribution Service;	)	
	)	
Applications for Waiver of the Commission's Common	)	
Carrier Point-to-Point Microwave Radio Service Rules;	)	
	)	
Suite 12 Group Petition for Pioneer's Preference;	)	PP-22
	)	
University of Texas - Pan American Petition for	)	
Reconsideration of Pioneer's Preference Request Denial	)	

COMMENTS

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COMMENTS

The Wireless Cable Association International, Inc. ("WCA"), by its attorneys and pursuant to Section 1.415 of the Commission's Rules, hereby submits its initial comments in response to the Notice of Proposed Rulemaking, Order, Tentative Decision and Order on Reconsideration (the "NPRM") released January 8, 1993 in the captioned proceeding.[1]

I. STATEMENT OF INTEREST AND EXECUTIVE SUMMARY.

As the trade association of the wireless cable industry, WCA is vitally interested in any allocation of spectrum that could be utilized to transmit video entertainment programming and ancillary voice and data services to consumers. Although the vast majority of the wireless cable systems operating today employ the Multipoint Distribution

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[1]Rulemaking to Amend Part 1 and Part 21 of the Commission's Rules to Redesignate the 27.5 - 29.5 GHz Frequency Band and to Establish Rules and Policies for Local Multipoint Distribution Service, FCC 92-297 (rel. Jan. 8, 1993)[hereinafter cited as "NPRM"].

Service ("MDS") and Instructional Television Fixed Service ("ITFS") channels in the 2.1 GHz and 2.5 GHz bands, wireless operators have constructed systems utilizing channels in the 18 GHz band, and have explored the viability of the 27.5 - 29.5 GHz frequency band (the "28 GHz band") and a variety of other bands for wireless cable operations. As a result, WCA and its members have been active participants in the Commission's proceedings to date involving the future of the 28 GHz band.[2]

In the comments that follow, WCA will respond to the Commission's solicitation of public comment on the wisdom of reallocating the 28 GHz band for the Local MDS ("LMDS"), and will address the specific rules proposed for governing the licensing and use of the 28 GHz band. For the reasons set forth in detail below, WCA believes that the Commission lacks sufficient information regarding the capabilities and limitations of 28 GHz band technology to intelligently craft a regulatory structure for LMDS at this time. If the record is supplemented sufficiently in response to the NPRM that the Commission can proceed, the Commission should carefully craft a regulatory environment designed to strengthen the competitive marketplace and limit the influx of speculative applications that seems to accompany every new spectrum allocation. WCA's specific suggestions in this regard are set forth below.

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[2]See, e.g. Comments of Wireless Cable Ass'n Int'l, RM 7872 (filed Jan. 15, 1992); Opposition of Wireless Cable Ass'n Int'l, PP-22 (filed Jan. 15, 1992); Letter of Paul J. Sinderbrand, Esq. to Donna R. Searcy, File No. 10380-CF-P-88 (dated June 14, 1989); Letter of Paul J. Sinderbrand, Esq. to Donna R. Searcy, File No. 10380-CF-P-88 (dated July 6, 1989); Letter of Paul J. Sinderbrand, Esq. to Hon. Alfred C. Sikes, File No. 10380-CF-P-88 (dated Nov. 1, 1989).

WCA will refrain from commenting at this time on the Commission's decision to deny the waiver requests that accompanied the almost 1,000 28 GHz applications that had been prematurely filed, since several virtually identical petitions for reconsideration are currently pending.[3] Suffice it to say that WCA had been a strong advocate for the denial of those "cookie-cutter" waiver requests,[4] and intends to oppose the pending petitions for reconsideration at the appropriate time. Similarly, WCA will not now comment in detail on the Commission's rejection of a petition by University of Texas - Pan American ("UTPA") for reconsideration of a prior decision to deny UTPA's request for a pioneer's preference.[5] WCA agrees with the Commission that UTPA should not be awarded a pioneer's preference. However, since UTPA has sought further reconsideration of the Commission's decision, WCA will refute UTPA's claim of entitlement to a pioneer's preference until the appropriate time.

II. Discussion Of The Notice Of Proposed Rulemaking

Wireless cable operators today are facing tremendous challenges in the marketplace as a direct result of the limited amount of spectrum available to them. With a maximum of 33 channels (20 of which must be substantially devoted to, or reserved for, educational programming), a wireless cable system almost always lags behind its franchised cable

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[3]See "Petitions for Reconsideration of Actions in Rule Making Proceedings," Public Notice, Report No. 1929 (rel. Feb. 26, 1993).

[4]See Letter from Paul J. Sinderbrand, Esq. to Hon. Alfred C. Sikes (dated Feb. 12, 1992).

[5]See NPRM, supra note 1, at ¶¶ 66-68.

competition in terms of channel capacity. Of great concern to WCA is the fact that the channel capacity gap is widening. It was not too long ago that the average franchised cable system had just 32 channels.[6] In numerous markets across the country, wireless cable operators have demonstrated their ability to compete against such franchised systems by offering a numerically similar channel lineup, plus lower rates and superior service.[7]

Today, however, wireless cable operators must face such behemoths as the Time Warner 150 channel system in Queens, New York.[8] While there has not been sufficient head-to-head competition between wireless cable and the new generation of 100+ channel franchised cable systems, common sense suggests that the wireless operator will be at a severe competitive disadvantage due to its limited channel capacity. While WCA is aggressively pursuing digital compression as a vehicle for offering consumers additional programming options,[9] so too is the cable industry. Since compression technology will

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[6]National Telecommunications and Information Administration, NTIA Telecom 2000: Charting the Course for a New Century, at 152 (Oct. 1988).

[7]Stump, "Toe to Toe with a Wireless Competitor," Cable World, at 28-29 (Oct. 5, 1992; "In the Trenches: Cable vs. Wireless, How Do Cable Operators Fight Back Against Price-cutting Competition?", at 13 (Aug. 24, 1992); Kerver, "Wireless Cable: Friend or Foe," Cablevision, at 20-24 (Oct. 5, 1992).

[8]Moshavi, "Time Warner Unveils 150 Channels," Broadcasting, at 18 (Dec. 23, 1991).

[9]See "Wireless cable will benefit more from digital compression," Communications Daily, at 7 (Aug. 24, 1992); "WCA Throws Down The Gauntlet," Multichannel News, at 31 (Aug. 10, 1992).

be equally available to the wireless and cable industries, the Commission cannot count on compression to close the channel gap.

Compounding the challenge for wireless cable operators is what the Commission has called "the increasing convergence of previously separate markets embracing voice, data, graphics and video."[10] Simply stated, the telephone companies want to expand into the distribution of video entertainment programming,[11] while the franchised cable operators want to add two-way voice and data services to their traditional video offerings.[12] Wireless cable operators, however, do not currently have access to the spectrum they need to add two-way services and keep pace.

As a result of these developments, WCA has been actively exploring the prospects for securing additional wireless cable allocations capable of supporting not only additional video programming, but also integrated voice and data offerings. Thus, its interest has been piqued by the claims of Suite 12 Group ("Suite 12") that the 28 GHz band could provide a vehicle for distributing upwards of 50 channels of video programming, along with a variety of ancillary two-way voice and data services.

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[10]Telephone Company-Cable Television Cross Ownership Rules, Section 63.54-63.58, 7 FCC Rcd 300, 305-306 (1991).

[11]See id.

[12]National Telecommunications and Information Administration, The NTIA Infrastructure Report: Telecommunications in the Age of Information, at 91 (Oct. 1991).

A. Additional Information Regarding The Real World Performance Of Suite 12's Technology Is Essential Before The Commission Can Develop A Regulatory Structure For The 28 GHz Band.

While LMDS could prove a godsend to the wireless cable industry, WCA nonetheless urges the Commission to proceed with caution before adopting rules to govern use of the 28 GHz band for point-to-multipoint video distribution and accompanying voice and data services. Put bluntly, WCA is troubled by Suite 12's aversion to providing the Commission and the public with an opportunity to scrutinize field data that would establish the technological capabilities and limitations of 28 GHz technology. The paucity of hard data in the record makes it difficult for WCA to draw any conclusions as to whether the 28 GHz band should be reallocated for the LMDS,[13] much less develop firm opinions as to what licensing and technical rules would best govern the LMDS.

Because the propagation characteristics of the 28 GHz band mandate the use of relatively small cells, Suite 12 has proposed a service design that is dependent upon a level of frequency reuse presently unproven under the operational conditions. As the

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[13]WCA finds it incredibly naive of the Commission to conclude that "the number of applications received seeking to provide similar service indicates a significant interest in both the technology and the service." See NPRM supra note 1, at ¶ 15. As the Commission should have learned from its experiences with the Interactive Video and Data Service, Personal Communications Service, 220-222 MHz band and other new services, a "gold rush" mentality takes hold whenever new spectrum becomes available. Given the "cookie cutter" nature of virtually all of the 28 GHz band applications filed, it should be apparent that the onslaught of applications was primarily a function of mill-like activity, and not an outpouring of genuine interest by knowledgeable parties. While a few of the applications were filed by legitimate wireless cable operators, those applications reflected a concern that the Commission might actually license the 28 GHz band prematurely by granting the mill-generated waiver requests, and cannot legitimately be read as an endorsement of Suite 12's technology.

Commission has recognized, Suite 12's system depends upon both the reuse of spectrum in adjoining cells utilizing cross-polarization, and the reuse of spectrum within cells for point-to-point links, again utilizing cross-polarization to prevent cochannel interference.[14] While the use of cross-polarization to limit cochannel interference is a well-established technique, never before have cochannel transmissions operated in such proximity to one another, and at such high frequencies, as Suite 12 envisions.

WCA is concerned that Suite 12's reliance on cross-polarization to achieve frequency reuse is difficult to square with Suite 12's description of the propagation characteristics of the 28 GHz band. Particularly since LMDS systems will utilize substantially lower transmitting towers than MDS systems, line-of-sight restrictions could prove daunting. Yet, Suite 12 contends that the tendency of 28 GHz transmissions to deflect off buildings obviates that concern. For example, Suite 12 claimed in its ill-fated petition for a Personal Communications Service pioneer's preference that "the omnidirectional transmitters employed by Suite 12 cause the millimeter waves to bounce off buildings at numerous angles so as to provide coverage to non-line of sight locations . . . ."[15] More recently, the New York Times reported that Suite 12 officials "say they solved the line-of-sight problem by taking advantage of the fact that signals at

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[14]See NPRM, supra note 1, at ¶ 9.

[15]Petition of Suite 12 Group for Pioneer"s [sic] Preference, PP-74, at 2 (filed May 4, 1991)

such high frequencies ricochet like golf balls off many types of obstacles . . . ."[16] The problem WCA sees, however, is that signals that ricochet like golf balls off of buildings tend to shift polarization in unpredictable fashion. Thus, it would appear that the very propagation characteristic that Suite 12 relies upon to resolve line-of-sight problems is anathema to the use of cross-polarization to achieve frequency reuse.

WCA has hardly been alone in raising questions regarding the technical limitations of Suite 12's system. Pacific Telesis[17] and even the Government's Institute for Telecommunications Sciences have identified other potential problems with the Suite 12 system. For example, the New York Times has reported that:

> "Bouncing off buildings can be a big benefit of using these frequencies, but it can also be a severe limitation," said William Utlaut, associate director of the Institute for Telecommunications Sciences in Boulder, Colo., a research arm of the Commerce Department. The problem, said Mr. Utlaut, is that bouncing signals can cause the "ghosts" that have always marred ordinary broadcast television.[18]

Rain fade has also been cited as a potentially limiting factor on service quality at the high frequencies employed by the Suite 12 system.[19]

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[16]Andrews "A New Microwave System Poses Threat to Cable TV," N.Y. Times, A1, D2 (Dec. 11, 1992).

[17]See Opposition of Pacific Telesis, PP-74 (filed June 1992).

[18]Id.

[19]See Lambert, "FM Wireless TV To Bite The Apple," Broadcasting, at 46-47 (Dec. 21, 1992).

The still unanswered question, WCA submits, is whether the technology advanced by Suite 12 can achieve the claimed results. No doubt, it is possible to transmit high quality video programming a short distance to carefully selected receive locations over the 28 GHz band in the absence of potentially interfering signals -- Suite 12 has apparently demonstrated as much in Brighton Beach, NY. The question remains, however, whether reliable service can be provided when potentially interfering signals are presented. Unfortunately, the Commission has been forced to accept on faith Suite 12's claims that the use of narrowbeam receive antennas with good discrimination characteristics obviates the problems associated with extreme frequency reuse, for there is no evidence in the record of how Suite 12's technology actually performs in the presence of signals from cochannel adjacent cells and point-to-point links that "ricochet like golf balls."[20]

Suite 12 has been testing its cellular concept pursuant to Experimental Radio Service authorizations since 1987,[21] and its Hye Crest Management, Inc. ("Hye Crest") affiliate secured an operating license for the 28 GHz band throughout the New York market more than two years ago.[22] While Suite 12 indicated in its initial Petition for Rulemaking that it had "thoroughly tested" its system,[23] Suite 12's curious failure to submit any test results to date is cause for concern. While Hye Crest has constructed its

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[20]See NPRM supra note 1, at ¶ 9.

[21]See Letter from Shant S. Hovnanian to Hon. Alfred C. Sikes (dated Oct. 13, 1989).

[22]Hye Crest Management, Inc., 6 FCC Rcd 332 (1991).

[23]See Suite 12 Petition for Rulemaking, RM 7872, at 4, n. 8 (dated Sept. 23, 1991).

first cellular node, it has yet to demonstrate that the system can reuse spectrum in the manner Suite 12 claims. Particularly given the vigor with which Hye Crest pressed the Commission to authorize its New York system and issue theNPRM, WCA finds this lack of information a cause for concern. If Suite 12's system works as well as Suite 12 claims, why the reluctance to prove the doubters wrong?

As a result of Suite 12's reluctance to address the real world capabilities and limitations of its technology, the timing of the Commission's proposed reallocation is impossible to square with the January 18, 1991 Memorandum Opinion and Order in which the Commission authorized Hye Crest to operate a 28 GHz video system in the New York metropolitan area. In issuing a license to Hye Crest, the Commission rejected arguments that a formal rule making should have been conducted first. The Commission reasoned that:

> A formal Rule Making proceeding to inquire as to the feasibility of permanently reallocating the 28 GHz band and establishing regulatory policies for the provision of a nationwide point-to-multipoint video service utilizing these frequencies would be premature. Although Hye Crest has indicated that its proposal is viable, and its proposal may well prove to be an innovative means to deliver video services to consumers, this will not be confirmed until it is actually implemented and subjected to the rigors of the marketplace. Should the proposal prove to be a success and the public benefits anticipated become a reality, a general investigation into alternative uses of the 28 GHz band would then be appropriate for consideration.[24]

At present, WCA sees no basis for the Commission to depart from the timetable announced in the Memorandum Opinion and Order and establish formal rules without

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[24]Hye Crest Management, Inc., 6 FCC Rcd 332, 335 (1991).

more information regarding the performance of Suite 12's technology. While the Commission has recognized that it needs "specific proposals for power, modulation requirements, channelization, bandwidth, emission characteristics, frequency stability antenna characteristics, gain, beamwidth, height and polarization and spectrum utilization," [25] Suite 12's reluctance to part with information makes it impossible for WCA and other interested parties to respond in a cogent manner.

B. If The Claims Of LMDS Advocates Prove Out, The Commission Should Assure That The 28 GHz Band Is Carefully Licensed To Achieve The Commission's Pro-Competitive Goals.

1. The Commission Should Ban Cable Television System Operators From Securing LMDS Licenses Covering Their Franchise Area.

According to the Commission:

> video programming will be the largest and most commercially significant use of this spectrum at this time. Moreover, such use of the 28 GHz band would provide additional competition to franchised cable companies.[26]

Yet, the Commission has shied away from proposing a LMDS/cable cross-ownership ban because "[t]here is no assurance this will be the case." [27] WCA submits that the Commission has it backwards -- until it is certain that the 28 GHz band will be primarily used for non-video purposes, a cross-ownership ban is essential.

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[25] NPRM, supra note 1, at ¶ 24.

[26] See id. at ¶ 30.

[27] Id., at ¶ 33.

At the outset, cable system operators are in all likelihood barred by Section 11 of the Cable Television Consumer Protection and Competition Act of 1992 (the "1992 Cable Act") from serving as LMDS licensees in their service areas. Section 11(a) amended Section 613 of the Communications Act of 1934 to provide that "[i]t shall be unlawful for a cable operator to hold a license for multichannel multipoint distribution service . . . in any portion of the franchise area served by that cable operator's cable system." Significantly, there is no evidence in the legislative history of the 1992 Cable Act that Congress intended for the phrase "multichannel multipoint distribution service" to be limited to licensees of 2.5 GHz band Multichannel Multipoint Distribution Service facilities. Indeed, that Congress did not capitalize the words of the phrase to conform to Commission usage [28] suggests strongly that the phrase is intended to be generic, applying to licensees of any wireless point-to-multipoint distribution technology and not just those operating at 2.5 GHz.

More importantly, however, it makes little sense for the Commission to reallocate spectrum for a competitive alternative to cable, and then permit cable to subvert the spectrum to solidify its current monopoly. History has shown that cable will attempt to co-opt competitive technologies whenever possible. From C-Band home satellite dishes[29]

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[28]See, e.g. 47 C.F.R. §§21.900(c), 21.901(d)(1)(i), 21.902(i)(1) (1992), all of which capitalize the phrase "Multichannel Multipoint Distribution Service" when referring to the 2.5 GHz band allocation.

[29]In 1985, for example, Turner Broadcasting System ("TBS"), Showtime and ESPN ran afoul of Tele-Communications, Inc. ("TCI") when they attempted to compete with TCI

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to Direct Broadcast Satellite [30] to wireless cable,[31] the cable industry has sought to preempt competition by gaining control over new technologies. It would be passing strange for the Commission to now permit cable operators to prevent the 28 GHz band from becoming a source of effective competition.

2. Local Exchange Carriers Are Barred From Providing Video Programming Over LMDS In Their Service Area.

The NPRM is strangely silent in addressing the appropriate role of local exchange carriers in the provision of video entertainment programming to the public through LMDS. While this is not the appropriate proceeding to argue the merits of the Second Report and Order, Recommendation to Congress, and Second Further Notice of Proposed Rulemaking in CC Docket No. 87-266, the "video dialtone" decision, the Commission should at a minimum make clear that telephone company participation in LMDS is restricted by the rules and policies set forth in that decision.[32]

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[29](...continued)
by assembling a package of services for distribution to home satellite dish owners. Those plans were dropped when TCI (the largest customer for the TBS, Showtime and ESPN programming services), reportedly expressed its displeasure to the three programmers. Not insignificantly, soon thereafter TCI began to market its own package of programming to dish owners -- a package that included ESPN, Showtime and TBS's CNN. See Powell, "Cable's Biggest Leaguer," Newsweek, at 40 (June 1, 1988).

[30]See Reply Comments of Wireless Cable Ass'n, MM Docket No. 89-600 (1990).

[31]See, e.g. Emergency Petition of Wireless Cable Ass'n Int'l for Declaratory Ruling, at 2-3 (filed Feb. 24, 1993); Comments of Wireless Cable Ass'n, Gen. Docket No. 90-54, at 104-109 (filed May 7, 1990).

[32]Telephone Company - Cable Television Cross-Ownership Rules, Sections 63.54-63.58, 7 FCC Rcd 5781 (1992).

3. If LMDS Would Provide Wireless Cable Operators With The Capability Of More Effectively Competing In The Video Distribution Marketplace, One Channel Block In Each Market Should Be Set Aside For Wireless Cable Operators.

In the NPRM, the Commission has solicited public comment as to whether the public interest would be served by setting aside one LMDS channel group in each market for wireless cable operators.[33] If LMDS is proven capable of providing the services Suite 12 claims, such a set aside would most certainly advance the public interest.

As noted above, there is a pressing need for additional spectrum to be allocated for wireless cable use. While the NPRM references various Commission actions to eliminate the regulatory burdens that have been imposed on the wireless cable industry, those decisions have had very little impact on the channel gap between the wireless and cable industries, and do nothing to address wireless' lack of a viable over-the-air two-way capability.[34] While wireless can today compete against cable systems of comparable size, the future survival of wireless operators in competition with the integrated broadband networks being planned by cable and telephone is far less certain. Therefore, WCA calls upon the Commission to set aside one of the two LMDS channel groups so that wireless cable operators may have an opportunity to expand along with their cable and telephone

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[33]See NPRM, supra note 1, at ¶ 19.

[34]The NPRM is simply wrong when it suggests that the Commission recently allocated additional spectrum for wireless cable operators. See NPRM, supra note 1, at ¶ 19. The decision cited merely provides wireless operators in a few areas the option of securing direct licensing of ITFS spectrum that is otherwise fallow, but does so subject to so many conditions that the option is of little value.

company competitors.[35] Such an expanded allocation mechanism strikes a delicate balance among the competing public interests of meeting the immediate need for alternative, cost-effective means of distributing video programming and ancillary services, creating a competitive marketplace, and fundamental fairness to wireless cable system operators.

An expanded allocation can be expected to reduce delay in implementing LMDS service to the public because in most markets just one or two local wireless operators will be eligible for assignment to the set-aside frequencies.[36] Given the continuing entrenchment of cable, the recent authorization of telephone company "video dialtone" and the imminent introduction of Direct Broadcast Satellite, mutually exclusive wireless cable applicants for the expanded LMDS allocation are likely to settle their differences so as to enable the earliest possible entry into the marketplace.[37]

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[35]In crafting an expanded allocation, the Commission should take care that only legitimate wireless cable operators can gain preferential access to the 28 GHz band. Certainly, WCA has no interest in seeing the speculators and greenmailers that have frustrated the development of wireless cable in so many markets to extend their reach into the 28 GHz band. Therefore, an entity should only be eligible for an expanded allocation if it can demonstrate that it is the licensee or lessee of at least 20 channels in a given market, including at least four of the thirteen MDS channels. WCA believes that this restriction, coupled with the construction and other requirements set forth in the NPRM, will prevent warehousing of LMDS spectrum by those eligible for a LMDS expanded allocation.

[36]If the Commission adopts the eligibility restriction set forth in the preceding footnote, the only circumstance under which there would be multiple eligibles would be if the Commission adopts very large service areas for LMDS licensing.

[37]Although WCA generally agrees with the Commission's proposal to ban settlements among competing LMDS applicants, it should not extend that policy to mutually-exclusive applicants for an expanded allocation. Given that only legitimate wireless cable operators

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The wireless industry does not believe, and has not proposed, that existing operators be given a handout at the expense of public interest. Indeed, WCA has narrowly tailored its mechanism to achieve the goal of early implementation of LMDS, while assuring that the public interest will be served. The separate allocation should have an automatic "sunset" provision, expiring one year after final rules are adopted. It should not provide for automatic licensing, but rather require the existing wireless operator to demonstrate its legal, technical and financial qualifications to operate an LMDS system. Applications should be subject to public notice, the filing of petitions to deny, and a Commission public interest finding. Licenses issued under the separate allocation will be subject to judicial review and to renewal challenge if a particular licensee has not served the public interest, further assuring the quality of service.

In considering the separate allocation proposal, the Commission must recall its mandate, as expressed in Section 1 of the Communications Act of 1934, as amended, "to make available, so far as possible, to all the people of the United States a rapid, efficient, Nation-wide . . . radio communications service with adequate facilities at reasonable charges." In the past, the Commission has routinely established separate frequency allocations where the need for the new service to be offered was immediate. For example, in 1949 the Commission established separate wireline and non-wireline frequency allocations in order to foster the growth of radio common carrier enterprises that would

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[37](...continued)
will be eligible for an expanded allocation, the purpose behind a settlement ban -- deterring speculative applications -- does not apply.

compete with telephone companies offering mobile communications in much the same manner as multiple channel MDS will compete with the cable industry.[38] The Commission reviewed this policy in 1963 and found that it had served the public interest well.[39]

In 1968, the Commission again established an expanded frequency allocation to be used for one-way paging services upon finding, inter alia, that, as with expanded MDS allocations here, "the specific allocations . . . will merely permit a continuation and extension of the existing operation on heretofore unavailable frequencies."[40] The Court of Appeals affirmed the Commission's expanded allocation award, recognizing that:

> the standard of "public interest, convenience, or necessity" by which the commission is to be guided in its actions, 47 U.S.C. 303, comprises many other factors [besides competition]; and indeed, were the Commission to base its action solely upon the ground that competition in the industry would be favored thereby and nothing more, we would have some doubt as to whether it had fulfilled its responsibility to consider other important criteria before determining whether its proposed rule is in the "public interest."[41]

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[38]See General Mobile Radio Service, 13 F.C.C. 1190, 1218, recon. denied, 13 F.C.C. 1242 (1949).

[39]See Mobil Telephone, Inc., 1 R.R.2d 957 (1963).

[40]Allocation of Frequencies (Guardband), 12 F.C.C.2d 841, 845 recon. denied, 14 F.C.C.2d 269, 270-71 (1968).

[41]Radio Relay Corp. v. F.C.C., 409 F.2d 322, 326 (2d Cir. 1969).

and finding that the immediate public need for an expansion of service was an important factor for Commission consideration.[42]

And, of course, most recently, the Commission adopted a separate allocation mechanism for cellular communications systems upon a finding that there was an immediate need for service to the public and that the need could be addressed most quickly by the existing carriers' expertise.[43]

Thus, the very factors which controlled WCA's designing of the LMDS one year expanded frequency allocation -- marketplace qualification of the existing operators plus the need to avoid delay in the authorization of a new and innovative service -- are those which have historically been cited by the Commission and the judiciary in authorizing other separate frequency allocations.

Equitable considerations, too, dictate that the existing wireless operators be granted the first opportunity to expand their channel capacities. It is these entrepreneurs who have invested the time, energy and money necessary to develop an industry which today provides video programming to hundreds of thousands of viewers nationwide, while at the same time developing the special expertise and ability necessary to operator LMDS stations. The Commission should not obsolete their efforts simply because another new

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[42]See id.

[43]See Inquiry Into The Use Of The Bands 825-845 MHz and 870-890 MHz For Cellular Communications Services, 86 F.C.C.2d 469, 493 (1981).

technology has come along -- to do so sends a chilling message to those who would invest in the communications industry.

Nor should the Commission ignore that by assisting wireless cable operators, it will also be assisting the ITFS community that has become dependent on wireless cable for financial support. Virtually every ITFS facility being funded today is the product of a partnership between the licensee and a wireless cable operator. If the Commission relegates wireless cable to second-class status, it will also be jeopardizing the goose that is laying ITFS's golden eggs.

The Commission must keep in mind that the touchstone of this proceeding is the "public interest." In determining the "public interest," a variety of factors must be considered, although none is determinative. The public interest in the provision of service for which there is an immediate need must be considered. So too must the public interest in providing that service in the most rapid and cost-efficient fashion to the maximum number of people be considered. Finally, the public interest in enhanced competition between wireless, franchised cable and the local telephone companies is ripe for consideration.

Each of these considerations has been factored into WCA's expanded allocation proposal. The Commission has established that there exists an unmet demand for video programming and ancillary voice and data services. WCA has proposed an allocation mechanism which not only assures a rapid entry of LMDS into the marketplace but also assures competition, both within the LMDS industry and by the LMDS industry in broader

markets. The Commission is urged to recognize that rapid implementation of LMDS, by expanded allocation, may be the best means of satisfying the interests of the public identified above.

C. The Commission's Proposal To Provide LMDS Licensees With Maximum Flexibility Should Be Implemented.

WCA believes that, if LMDS is technologically viable, the Commission is proceeding along the right track in proposing rules that will afford licensees maximum flexibility in crafting their service offerings.[44] To date, wireless cable operators have suffered due to Commission micro-management of the MDS and ITFS spectrum. Therefore, WCA applauds the Commission for attempting to provide LMDS licensees with the maximum possible flexibility in tailoring their usage of the spectrum, and hopes that similar flexibility will soon be afforded MDS and ITFS licensees.

D. The Commission's Proposals To Deter Speculative Applications Should Be Adopted And Augmented To Limit The Inevitable "Gold Rush."

In the NPRM, the Commission has proposed various rules designed to deter the filing of speculative applications. As WCA has stated numerous times in the past, bans on settlements, one day filing windows, strict "one-to-a-market" rules, limitations on license assignment and tough financial qualification review should serve as effective deterrents to speculative applications. Because WCA views on those issues are a matter of record before the Commission, WCA will refrain from commenting further, other than to express its support for the Commission's proposal to implement those features in its

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[44]See NPRM, supra note 1, at ¶ 20.

LMDS rules. Rather, WCA will address other proposals advanced in the NPRM to deter speculation that WCA has not previously addressed.

1. Although Minimum Service Requirements Should Be A Critical Element Of The Commission's LMDS Regulatory System, The Commission Cannot Develop Rational Benchmarks Absent More Technical Information.

In the NPRM, the Commission has proposed to require licensees to be capable of providing LMDS service to at least 90% of the population residing within the service area "[i]n order to ensure that licensees fulfill their responsibility to use the radio spectrum efficiently and provide the best possible service to the public . . . ."[45] WCA strongly supports that proposal; it should prove an effective mechanism for deterring speculative applications and expediting service to the public.[46]

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[45]NPRM, supra note 1, at ¶ 32.

[46]At this juncture, WCA does not possess sufficient information to determine whether the public interest will be served by licensing LMDS operators by Basic Trading Areas ("BTAs"). Because the record does not reflect how large an area each LMDS cell can reliably serve, it is impossible to judge whether the use of BTAs will effectively preclude all but the largest companies from participating in LMDS. Obviously, the more cells required, the greater the barrier to entry. While BTAs may be sensible for PCS licensing areas due to the propensity of individuals to travel throughout their BTA, the same consideration does not apply to the fixed services contemplated for the 28 GHz band. In the past, the Commission has strived to introduce as many voices as possible into the marketplace, even if only in adjoining areas, to maximize diversity. The proposed use of BTAs seems contrary to that approach. Moreover, it is unclear that there is any public interest benefit to be gained by having fewer licensees serving larger areas. Given that video programming has historically been delivered by broadcasters and cable operators in market areas much smaller than the BTAs, WCA questions whether consumers throughout a BTA truly have a "community of interest" as the NPRM suggests. See NPRM, supra note 1, at ¶ 30.

However, WCA questions how the Commission intends to implement its proposed rule. Neither the proposed implementing rule (proposed Section 21.1007) nor the text of the NPRM provide any discussion of the standards that will be employed for determining whether service is being provided at a given location.

WCA submits that a two-pronged analysis is required to determine whether service is available at a given location. First, based on the Commission's handling of this issue in the other services, WCA presumes that the Commission will require each LMDS licensee to provide a signal of a given minimum strength to those locations where 90% of the population of the licensing area reside. Given the scarcity of technical information in the record, however, it is impossible for WCA to propose appropriate signal strength benchmarks at this time. Simply put, the record does not provide any factual basis for determining the minimum received signal level necessary to provide adequate video, voice and/or data service.

Second, Suite 12's reliance on frequency reuse mandates that a second benchmark be applied to determine whether service is available at a given locale. Even if the requisite signal strength is present at a subscriber's receiver, that subscriber may not be able to receive an acceptable signal due to the presence of an interfering cochannel signal. Again, the Commission lacks sufficient information to develop an appropriate standard for evaluating intra-system interference. Until field data is presented to the Commission that establishes both the desired-to-undesired signal strength ratio necessary to yield an